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CIO Viewpoint

Carbon costs and the G7's fossil fuel pledge pave path to net zero

Investment Solutions

21 June 2021

The leaders of the Group of Seven (G7) countries agreed to stop subsidising fossil fuels within four years. The 11-13 June summit's most far-reaching pledge builds on existing commitments transitioning to net-zero carbon economies over three decades. That presents investors with portfolio challenges as well as unparalleled growth opportunities in new technologies and evolving industries.

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Since 1970, carbon dioxide emissions have increased by about 90% with fossil fuels responsible for 78% of that rise. More than 100 nations are now committed to net zero carbon emissions by 2050, and China has set itself the same goal by 2060. The G7's commitment to phasing out fossil fuel subsidies, which covers the US, Germany, Japan, France, the UK, Canada and Italy, will be instrumental in meeting these targets, and could redirect substantial financial resources towards expanding renewable-energy capacity.

One critical lever to achieve net-zero emissions targets within three decades will be to stop subsidizing the real costs of using fossil fuels. But in the same way that bread was politically sensitive in ancient Rome or Bourbon France, fuel prices remain so in most countries today. Still, cutting fossil fuel subsidies completely would slash carbon emissions by more than one quarter, the International Monetary Fund has estimated, and almost halve deaths linked to air pollution. From an economic point of view, spending on fuels does not lead to a boost in economic output but less efficient energy use.

The scale of fossil fuel subsidies is vast. Government support for the production and consumption of fossil fuels totalled USD 468 billion in 2019, according to an analysis of 81 economies by the Organisation for Economic Cooperation and Development and the International Energy Agency. Many subsidies are poorly targeted, disproportionally benefiting wealthier segments of the population that use more of the subsidised fuels, and encourage wasteful consumption while pushing up emissions and straining government budgets. The IMF also calculated the real costs of fossil fuels to society. If all the negative externalities related to climate damage, air pollution and the side effects of fossil fuels were factored in, the global cost of fossil fuel subsidies represented USD 5.2 trillion, or 6.5% of global gross domestic product in 2017.

Key takeaways

- The G7 has committed to phase-out subsidies for fossil fuels by 2025, allowing more accurate - and higher - carbon pricing
- The IMF has proposed setting a minimum carbon price and the EU will overhaul its emissions trading system next month
- While regulatory changes make carbon hard to value, investors need to watch firms' climate transition plans
- Portfolios will increasingly reflect preferences for companies with strategies to cut carbon emissions.

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Weekly publication of Lombard Odier – Contacts: Investment Solutions, investment-solutions@lombardodier.com
Data as of 21 June 2021 unless otherwise stated.

Pricing carbon

Removing and reforming inefficient fossil fuel subsidies would therefore allow market prices to better reflect the true costs of energy. Subsidies distort the relative cost of energy in favour of fossil fuels, despite the dramatic declines in the absolute costs of renewable energy sources in recent years.

Efforts to more accurately price carbon include the world's largest carbon market, the European Emissions Trading System (ETS).

The ETS sets pollution ceilings on carbon for nearly 12,000 power generators, companies and airlines across the region. Until 2018, the price of carbon permits under this European cap-and-trade system did not rise above EUR 10 per metric tonne (mt). Since October 2020, the price has more than doubled reaching a record in mid-May of EUR 56.65 /mt and is currently trading at EUR 52.09 / mt (see chart).

Demand for these emission rights and accompanying prices has risen in line with plans to impose stricter pollution goals. Unless emissions fall, trading carbon in itself will not cut greenhouse gas pollution. While the mechanism appears to be working, the price of carbon "should be much higher," the EU's executive says, to make it effective in tackling long-term pollution. In order to meet the Paris Agreement's goal of limiting global warming to 1.5 degrees Celsius, the price needs to be closer to EUR 100/mt this decade, according to the World Bank.

Setting a floor

On 18 June, the IMF outlined a proposal that would set three minimum carbon prices for the US, European Union, China, India, Canada and the UK by 2030, from USD 75, 50 or 25 per ton, for an advanced, high or low-income developing economy. That would help to set an international price floor and keep emissions this decade below the 2 degrees Celsius Paris accord target. Worldwide four-fifths of emissions "remain unpriced," said the IMF, with the average price worldwide just USD 3 per ton.

The European Commission is set to publish a new set of measures on 14 July that will revise and possibly expand the ETS market in line with the bloc's 2030 target of halving carbon emissions. We expect the new measures to accelerate the annual 2.2% cut to the number of emissions offered, and extend the number of polluters who need to pay, phase-out free allowances and introduce a carbon border tax. This would all add structural support for rising carbon prices.

Higher carbon prices would be a more efficient tool once applied across all sectors and countries more broadly, encouraging industries to make the leap to emissions cuts, incentivizing research and investment in innovative alternative energies. As energy market evolves, demand for the metals and minerals integral to renewable energy technologies can only increase.

European carbon prices in euros per metric tonne

Source: Bloomberg

Alternative sources of energy employ technologies that are dependent on metals and elements. Solar panels need arsenic, gallium, germanium, indium, and tellurium, while wind turbines rely on aluminium and rare-earth elements. Energy storage in batteries, in turn, depends on cobalt, graphite, lithium, and manganese while all machinery depends on copper, forecast to experience a 60% rise in demand over the next two decades.

The G7 also agreed to scale-up investment in the technology and infrastructure needed to facilitate the transition away from carbon. In the wake of the pandemic, the US, EU and Japan have all committed to far-reaching infrastructure projects that will support the recovery, and this net-zero transition.

Positioning portfolios

The carbon market's exposure to regulatory supply changes makes it difficult to value as an asset, and subject to short-term volatility. This said, the long-term price rise is clear, and in many studies, is costed in a range of USD 150 – 300 / mt through 2040. As investors factor-in the scale of the net-zero transition and pay ever-closer attention to firms' climate action plans, we are also likely to see rapid shifts in market sentiment.

Consumption trends are already changing rapidly and will drive differentiation within industries. For an increasing number of sectors, starting with energy providers, utilities and materials, valuations will begin to reflect the rising cost of carbon. That means investors should favour those companies that are furthest along the road to zero emissions and apply a thematic approach.

Within the alternative energy and infrastructure sector, there will be clear long-term winners and losers, depending which energy source takes over as a dominant fuel on the road to net zero. Investment strategies must reflect this transition to new business models, and identify opportunities in carbon-intensive industries where there are solutions to cut emissions with the greatest impact on our climate.

We call these companies 'ice-cubes' because they can have a 'cooling' impact on the climate as they work to reach the Paris Agreement's targets. Others, failing to transition towards net zero, are more appropriately categorised as 'burning logs' and risk being left with stranded assets as they struggle to operate in a net-zero regulated world.

Investors will need diversified exposure to sustainable energy and, given the potential volatilities, benefit from active management.

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